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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,702	03/30/2001	Kyoung Sub Kim	8733.308.00	5219

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EXAMINER

DUONG, THOI V

ART UNIT PAPER NUMBER

2871

DATE MAILED: 12/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,702

Applicant(s)

KIM, KYOUNG SUB

Examiner

Thoi V Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 ~~is/are~~ rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Amendment, Paper No. 6, filed October 01, 2002.

Accordingly, claim 1 was amended and new claims 7-11 were added. Currently, claims 1-11 are pending in this application.

Claim Objections

2. Claim 7 is objected to because of the following informalities: on page 3, line 4, "farm" should be --frame--. Appropriate correction is required.

3. Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 depends on claim 9 but recites the same limitation as claim 9.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first pad in claims 1 and 7 must be shown in Fig. 4 or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda (USPN 5,929,950).

As shown in Figs. 4 and 5, Matsuda discloses a liquid crystal display device, comprising: a liquid crystal panel 4; a backlight assembly 7 for radiating a light onto the liquid crystal panel; a panel guide 3 provided between the backlight assembly and the liquid crystal panel to support the liquid crystal panel; and a first pad 3a provided between the panel guide and the backlight assembly forming a distance between the panel guide and the backlight assembly and thermally insulating the liquid crystal panel from a ^{light in the backlight assembly} light guide 9 included in the backlight assembly and the panel guide. Matsuda discloses that the first pad is a silicon pad and the first pad is a resin coated between the light guide and the panel guide (col. 3, lines 35-39). The liquid crystal display device further comprises: a main frame 3 to which the backlight assembly is secured; a printed circuit board 5a installed under the main frame; a tape carrier package 6a mounted with drive integrated circuits for driving the liquid crystal panel and installed between the liquid crystal panel and the printed circuit board; a top case 2 for surrounding the upper edge of the liquid crystal panel and the side of the main frame; and a bottom case 8 installed under the printed circuit board and having

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one side assembled in such a manner to overlap with the top case. Finally, in Fig. 5, Matsuda shows a second pad provided between the circuit board and the tape carrier package, and a third pad provided between the tape carrier package and the bottom case, wherein the tape carrier package is arranged between the printed circuit board and the third pad.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda in view of Kawano et al. (USPN 6,195,141 B1).

Matsuda discloses a LCD device that is basically the same as that recited in claims 6 and 8-11 except that the second and third pads are not formed on both sides of the printed circuit board. As shown in Fig. 3, Kawano discloses a LCD device comprising a liquid crystal panel 7 and a printed circuit board 6 which is securely held between a lower cover 14 and an upper cover 17 through buffer members 20. Kawano teaches that the buffer members are made of elastic material to prevent shock impact from damaging the connection between the printed circuit board and the liquid crystal panel, and hence the contents of display can be surely display on the liquid crystal panel (col. 2, lines 19-28; col. 3, lines 41-44). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the LCD

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device of Matsuda with the teaching of Kawano by forming a second silicon pad provided between the main frame and the printed circuit board to maintain a distance between the main frame and the printed circuit board and a third silicon pad provided between the printed circuit board and the bottom case to maintain a distance between the printed circuit board and the bottom case so as to secure the printed circuit board in place and also prevent shock from affecting display quality.

Response to Arguments

9. Applicant's arguments filed on October 01, 2002 have been fully considered but they are not persuasive.

In regard to the objection of the drawings, Applicant argued that the pads in claims 1 and 6 are clearly shown in the drawings, as elements 54, 56A, and 56B in Fig. 5, and described in the specification. The Examiner disagrees with the Applicant's remarks because Fig. 5 is only a cross-section of Fig. 4, and Fig. 4 (Top view) needs to show at least how the first pad, which is considered as the main invention of the Applicant, is formed on top of the light guide such that it thermally insulates the liquid crystal panel from a light in the backlight assembly.

Applicant also argued that Matsuda does not suggest the limitation "a pad provided between the panel guide and the back light assembly forming a distance between the panel guide and the back light assembly and thermally insulating the liquid crystal panel from a light in the back light assembly" recited in the amended claim 1. The Examiner disagrees with the Applicant's remarks because Matsuda also discloses a liquid crystal device comprising a similar pad in a similar structure. Thus, this pad will

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assume the same functions as "forming a distance between the panel guide and the back light assembly and thermally insulating the liquid crystal panel from a light in the back light assembly."


Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong
12/06/2002



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